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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,402	02/12/2001	Junichi Yamanouchi	034299-306	8498

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/14/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/780,402

Applicant(s)

YAMANOUCI ET AL.

Examiner

Callie E. Shosho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 8-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

**Claim Rejections - 35 USC § 103**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-3, 5, and 8-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sacripante et al. (U.S. 6,025,412) or Tsutsumi et al. (U.S. 6,031,019) either of which in view of JP 09059522.

The rejection is adequately set forth in paragraph 3 of the office action mailed 11/22/02, Paper No. 9, and is incorporated here by reference.

3. Claims 1-5 and 8-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Sacripante et al. (U.S. 6,025,412) or Tsutsumi et al. (U.S. 6,031,019) either of which in view of JP 03231975.

The rejection is adequately set forth in paragraph 4 of the office action mailed 11/22/02, Paper No. 9, and is incorporated here by reference.

**Response to Arguments**

4. Applicants' arguments filed 5/22/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that:

(a) Sacripante et al. is not a relevant reference against the present claims given that the present claims require oil-soluble dye and oil-soluble polymer as separate components while Sacripante et al. disclose dye chemically attached to polymer.

(b) There is no motivation to combine Tsutsumi et al. with JP 09059522 or JP 03231975 given that Tsutsumi et al. already disclose that the ink exhibits stability and image quality and given that the examiner has not provided any evidence to show that the use of the dyes of either JP 09059522 or JP 03231975 would result in an improvement in the stability and image quality characteristics of the ink of Tsutsumi et al.

With respect to argument (a), it is agreed that Sacripante et al. disclose that the dye is chemically attached to the polymer either as a main chain constituent (incorporated into the base resin chain) or a side chain constituent.

However, there is nothing in the scope of the present claims that excludes the oil-soluble dye from being chemically attached to the oil-soluble polymer. That is, the present claims only require that the ink comprises coloring particulates comprising polymer and oil-soluble dye. This recitation is broad enough to encompass particulates containing dye and polymer as separate components as well as dye attached to polymer. A coloring particulate which comprises dye attached to polymer comprises dye and polymer. Whether the coloring particulates contain dye which is attached as a side chain to the polymer or dye which is mixed with the polymer, in either case, the coloring particulate comprises dye and polymer as required in the present claims.

Thus, the coloring particulates of Sacripante et al., i.e. the polymer which has dye attached, comprises dye and polymer and thus encompasses the scope of the present claims.

With respect to argument (b), it is noted that Tsutsumi et al. disclose water-based ink jet ink and method of ink jet printing wherein the ink comprises polymer particles colored with oil-soluble dye wherein the polymers include polyurethane and polyester comprising 1-25% ionic groups. However, there is no disclosure in Tsutsumi et al. of the specific oil-soluble dye presently claimed. This is why Tsutsumi et al. is used in combination with either JP 09059522 or JP 03231975 which each disclose oil-soluble dye identical to that presently claimed.

Applicants argue that given Tsutsumi et al. already disclose ink with good stability that produces prints with excellent image quality characteristics, there is no motivation to combine Tsutsumi et al. with either JP 09059522 or JP 03231975 especially given that there is no evidence that the dyes of either JP 09059522 or JP 03231975 when used in Tsutsumi et al. would result in an improvement in the stability and image quality characteristics of the ink of Tsutsumi et al.

However, while Tsutsumi et al. disclose that the ink possesses excellent image quality characteristics, these characteristics refer to excellent waterfastness and print density. The motivation for using the presently claimed dye as disclosed by JP 09059522 is to produce a printed image with excellent color tone, reproducibility, and light resistance while the motivation for using dye as disclosed by JP 03231975 is to produce a printed image with good hue. Thus, one skilled in the art would combine Tsutsumi et al. with either JP 09059522 or JP 03231975 in

order to produce printed image with excellent color tone, reproducibility, and light resistance or alternatively, good hue.

Although there is no explicit disclosure that the use of the oil-soluble dyes of either JP 09059522 or JP 03231975 would result in the improvement of the stability and image quality characteristics of the ink of Tsutsumi et al., the courts have held that “the motivation to combine can arise from the knowledge that the prior art elements will perform their expected functions to achieve their expected results when combined for their common purpose.” *Miles Lab, Inc. v. Shandon Inc.* 997 F.2d at 878, 27 USPQ 2d 1123, 1128 (Fed.Cir. 1993). Based on the teachings of either JP 09059522 or JP 03231975, one of ordinary skill in the art would have recognized that the dyes functions so as to improve color tone, reproducibility, and light resistance or alternatively, hue in inks and would have expected the dyes of either JP 09059522 or JP 03231975 to function as such in other inks such as those disclosed by Tsutsumi et al.

Although the motivation for using the dyes disclosed by either JP 09059522 or JP 03231975 is not to produce ink with good image quality as defined by Tsutsumi et al., i.e. good waterfastness and print density, JP 09059522 or JP 03231975 do teach improving the image quality of inks just in terms of different parameters then disclosed by Tsutsumi et al. However, given that Tsutsumi et al., JP 09059522 and JP 03231975 are drawn to the same field of endeavor, i.e. ink jet inks, given that Tsutsumi et al. disclose use of dye which is preferably oil-soluble, and given that JP 09059522 that the presently claimed dye is used to produce a printed image with excellent color tone, reproducibility, and light resistance while the motivation for using the presently claimed dye as disclosed by JP 03231975 is to produce a printed image with good hue which are characteristics pertinent to all ink jet inks including those disclosed by

Tsutsumi et al., it is the examiner's position that there is motivation to combine Tsutsumi et al. with either JP 09059522 or JP 03231975.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS

August 8, 2003